

Cisco IP Phone Configuration

Cisco IP Phones as full-featured telephones can plug directly into your IP network. You can use the Cisco CallManager Administration phone configuration windows to configure the following Cisco IP Phones and devices:

- Cisco IP Phone 7900 family (models 7960, 7940, 7935, 7936, 7920, 7910, and 7905)
- Cisco IP Phone model 30 VIP
- Cisco IP Phone model 12 SP+
- H.323 clients
- Computer Telephony Integration (CTI) ports
- Cisco ATA 186 telephone adapter
- Cisco VG248 Analog Phone Gateway



Note You configure the Cisco VG248 phone ports from the Gateway Configuration window of Cisco CallManager Administration. The following procedures apply for updating or deleting Cisco VG248 phone ports. See the "Gateway Configuration" section on page 44-1 for Cisco VG248 gateway configuration information.

After you add a Cisco IP Phone to Cisco CallManager Administration, information from the RIS Data Collector service displays in the Phone Configuration window. When available, the IP address of the device and the name of the Cisco CallManager with which the device registered display. The following topics provide information about working with and configuring Cisco IP Phones in Cisco CallManager Administration:

- Configuring Cisco IP Phones, page 45-2
- Gateway Configuration, page 44-1
- Finding a Phone, page 45-28
- Configuring Directory Numbers, page 45-29
- Phone Button Template Configuration, page 47-1
- Phone Configuration Settings, page 45-13
- Phone Configuration Checklist, Cisco CallManager System Guide

Configuring Cisco IP Phones

You can automatically add phones to the Cisco CallManager database by using auto-registration, manually add phones by using the phone configuration windows, or add phones in groups with the Cisco Bulk Administration Tool (BAT). By enabling auto-registration, you can automatically add a Cisco IP Phone to the Cisco CallManager database when you connect the phone to your IP telephony network. During auto-registration, Cisco CallManager assigns the next available sequential directory number to the phone. In many cases, you might not want to use auto-registration; for example, if you want to assign a specific directory number to a phone. If you do not use auto-registration, you must manually add phones to the Cisco CallManager database or use BAT. BAT, a plug-in application, makes it possible for system administrators to perform batch add, modify, and delete operations on large numbers of Cisco IP Phones. Refer to the *Bulk Administration Tool Guide for Cisco CallManager* for detailed instructions on using BAT.

After you add a Cisco IP Phone to Cisco CallManager Administration, the RIS Data Collector service displays the device name, registration status, and the IP address of the Cisco CallManager to which the phone is registered in the Phone Configuration window.

For information on how to configure phones as well as H.323 clients, CTI ports, and other devices from Cisco CallManager Administration, see the following topics:

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Displaying the MAC Address of a Phone, page 45-3
- Adding a Phone, page 45-4
- Deleting a Phone, page 45-11
- Resetting a Phone, page 45-8
- Updating a Phone, page 45-10
- Copying an Existing Phone, page 45-7
- Phone Configuration Settings, page 45-13
- Configuring Speed-Dial Buttons, page 45-22
- Speed Dial Configuration Settings, page 45-23
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Displaying the MAC Address of a Phone

The Media Access Control (MAC) address comprises a unique, 12-character, hexadecimal number that identifies a Cisco IP Phone or other hardware device. Locate the number on a label on the bottom of the phone (for example, 000B6A409C405 for Cisco IP Phone 7900 family models or SS-00-0B-64-09-C4-05 for Cisco IP Phone models SP 12+ and 30 VIP). Cisco CallManager makes the MAC address a required field for Cisco IP Phone device configuration. When entering the MAC address in Cisco CallManager fields, do not use spaces or dashes and do not include the "SS" that may precede the MAC address on the label. To display the MAC address when the phone is powered on, refer to the Cisco IP Phone documentation that supports your phone model. The following examples show steps that you may perform for the Cisco IP Phone models 12 SP+ and 30 VIP or Cisco VG248 phone ports:

- Cisco IP Phone models 12 SP+ and 30 VIP—Press ** to display the MAC address on the second line of the LCD display.
- Cisco VG248 phone ports—The MAC address specifies the endpoint from the Gateway Configuration window of Cisco CallManager Administration. See the "Gateway Configuration" section on page 44-1 for configuration information.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Adding a Phone, page 45-4
- Updating a Phone, page 45-10
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Adding a Phone

Before a Cisco IP Phone can be used, you must use this procedure to add the phone to Cisco CallManager. You can also use this procedure to configure H.323 clients, CTI ports, Cisco ATA 186 telephone adapter, or the Cisco VG248 Analog Phone Gateway (each of the 48 ports is recognized and configured as a phone). H.323 clients can be Symbol NetVision phones or Microsoft NetMeeting clients. CTI ports designate virtual devices that Cisco CallManager applications such as Cisco SoftPhone and Cisco AutoAttendant use.



Note

If you are planning to use a TAPI application to control CTI port devices that are using the Cisco TAPI Service Provider (TSP), then you may only configure one line per CTI port device.



Add the Cisco VG248 Phone Ports from the Gateway Configuration window of Cisco CallManager Administration. See the "Gateway Configuration" section on page 44-1 for configuration information.

Procedure

in Figure 45-1.

Choose Device > Add a Device .
The Add a New Device window displays.
From the Device Type drop-down list box, choose Phone and click Next.
The Add a New Phone window displays.
From the Phone type drop-down list, choose the appropriate phone type or device and click Next . After you choose a phone type, you cannot modify it.
The Phone Configuration window displays.
Enter the appropriate settings as described in Table 45-1.
Only the settings that are appropriate to the chosen phone type appear in your window.
Click Insert.
A message displays stating that the phone has been added to the database.
To add a directory number to this phone, click OK and enter the appropriate settings in the Directory Number Configuration window as described in the "Directory Number Configuration Settings" section on page 45-34. To return to the Phone Configuration window, click Cancel .
After you add a Cisco IP Phone to Cisco CallManager Administration, information from the RIS Data Collector service displays in the Phone Configuration window. When available, the IP address of the device and the name of the Cisco CallManager with which the device registered display as illustrated



Figure 45-1 Phone Configuration Window

Step 7 Reset the phone after making changes to apply the new settings. See the "Resetting a Phone" section on page 45-8.

Next Steps

If you want to configure speed-dial buttons to this phone, see the "Configuring Speed-Dial Buttons" section on page 45-22. If you want to configure services for this phone, see the "Configuring Cisco IP Phone Services" section on page 45-24.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Resetting a Phone, page 45-8
- Adding a Directory Number, page 45-30
- Deleting a Phone, page 45-11
- Updating a Phone, page 45-10
- Phone Configuration Settings, page 45-13
- Configuring Speed-Dial Buttons, page 45-22
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Copying an Existing Phone

If you want to manually add several similar phones to the Cisco CallManager database, you can add one and then copy its basic settings to apply to another phone. You must change at least the Media Access Control (MAC) address before inserting the new phone into the database.

To copy phone settings, perform the following procedure.

Procedure

Step 1	Choose Device > Phone .				
	The F	ind and List Phones window displays.			
Step 2	Enter	Enter search criteria to locate a specific phone and click Find.			
	A list	of phones that match the search criteria appears.			
Step 3	Click	the Copy icon for the phone whose settings you want to copy.			
	The P	hone Configuration window displays.			
Step 4	Enter the MAC address of the new phone.				
	Note	For information on obtaining the MAC address, see the "Displaying the MAC Address of a Phone" section on page 45-3.			
Step 5	Updat	e the appropriate settings as described in Table 45-1.			
Step 6	Click Insert.				
	A mes	ssage displays that states that the phone has been added to the database.			
Step 7	To add a directory number to this phone, click OK and enter the appropriate settings in the Directory Number Configuration window as described in the "Directory Number Configuration Settings" section on page 45-34. To return to the Phone Configuration window, click Cancel .				

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Finding a Phone, page 45-28

- Adding a Phone, page 45-4
- Resetting a Phone, page 45-8
- Updating a Phone, page 45-10
- Deleting a Phone, page 45-11
- Phone Configuration Settings, page 45-13
- Configuring Speed-Dial Buttons, page 45-22
- Adding a Directory Number, page 45-30
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Resetting a Phone

You must reset a Cisco IP Phone after you add a directory number or update its settings for your changes to take affect. To reset a Cisco IP Phone by using Cisco CallManager Administration, perform the following procedure.



If a call is in progress, the phone does not reset until the call finishes.

Procedure

Choose Device > Phone .
The Find and List Phones window displays.
To locate a specific phone, enter search criteria and click Find.
A list of phones that match the search criteria displays as illustrated in Figure 45-2.

Matching record(s) 1 to 20 of 1703 Real-time Information Service returned information for 20 of 20 devices listed below.						
	Device Name	Description	Device Pool	Status	IP Address	Сору
TZ SP+	SEP000196BFF752	Auto 1594	Default	Not Registered	10.35.5.161	B ∳
TZ SP+	SEP000196BFF75C	Auto 2010	Default	Not Registered	10.35.5.164	B
TZ SP+	SEP000196BFF75D	Auto 2225	Default	Not Registered	10.35.7.109	B ∳
TZ SP+	SEP000196BFF75E	Auto 1691	Default	Not Registered	10.35.6.158	B
TZ SP+	SEP000196BFF75F	Auto 1073	Default	Not Registered	10.35.6.84	B ₽
IZ SP+	SEP0001968FF760	Auto 1789	Default	Not Registered	10.35.5.86	B ₽
TZ SP+	SEP0001968FF761	Auto 2042	Default	Not Registered	10.35.4.215	P

Figure 45-2 Find and List Phones Window

Step 3 Check the check boxes next to the phones that you want to reset. To select all the phones in the window, check the check box in the matching records title bar.

Step 4 Click Reset Phone.

The Reset Device window displays.

- **Step 5** Click one of the following buttons:
 - **Restart**—Restarts the selected devices without shutting them down (reregisters the phones with Cisco CallManager).
 - **Reset**—Shuts down the selected devices and brings them back up (performs a complete shutdown and reinitialization of the phones).
 - **Close**—Returns you to the previous window without restarting or resetting the selected devices.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Adding a Phone, page 45-4
- Updating a Phone, page 45-10
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Updating a Phone

To update a Cisco IP Phone by using Cisco CallManager Administration, perform the following procedure.

Procedure

Step 1	Choose Device > Phone .
	The Find and List Phones window displays.
Step 2	To locate a specific phone, enter search criteria and click Find.
	A list of phones that match the search criteria appears.
Step 3	From the list, click the name of the phone that you want to update.
	The Phone Configuration window displays.
Step 4	Update the appropriate settings as described in Table 45-1.
Step 5	Click Update.
Step 6	Click Reset Phone to reset or restart the phone and apply the new settings.
	Restarting the phone reregisters the phones with Cisco CallManager without shutting the phone down. Resetting the phone shuts down the phone and brings it

back up (performs a complete shutdown and reinitialization of the phones).

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Adding a Phone, page 45-4
- Resetting a Phone, page 45-8
- Phone Configuration Settings, page 45-13
- Configuring Speed-Dial Buttons, page 45-22
- Speed Dial Configuration Settings, page 45-23
- Finding a Phone, page 45-28

- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Deleting a Phone

To delete a Cisco IP Phone by using Cisco CallManager Administration, perform the following procedure.

Before You Begin

If you try to delete a phone that is in use, Cisco CallManager displays an error message. To find out which directory numbers are using the phone, click the **Dependency Records** link from the Phone Configuration window. For more information about dependency records, see the "Accessing Dependency Records" section on page A-1. Before deleting a phone that is currently in use, you should perform either or both of the following tasks:

- Assign a different dir to any media resource groups that are using the media termination point that you want to delete. See the "Updating a Media Resource Group" section on page 28-5.
- Delete the media resource groups that are using the media termination point that you want to delete. See the "Deleting a Media Resource Group" section on page 28-7.

Procedure

Step 1 Choose **Device > Phone**.

The Find and List Phones window displays.

Step 2 To locate a specific phone, enter search criteria and click Find.A list of phones that match the search criteria displays as illustrated in Figure 45-3.

Matching record(s) 1 to 20 of 1703 Real-time Information Service returned information for 20 of 20 devices listed below.							
		Device Name	Description	Device Pool	Status	IP Address	Сору
	() 12 SP+	SEP000196BFF752	Auto 1594	Default	Not Registered	10.35.5.161	⊡ ⊊
	TZ SP+	SEP000196BFF75C	Auto 2010	Default	Not Registered	10.35.5.164	⊳ ₽
	TZ SP+	SEP000196BFF75D	Auto 2225	Default	Not Registered	10.35.7.109	s,
	(2) 12 SP+	SEP000196BFF75E	Auto 1691	Default	Not Registered	10.35.6.158	D\$
	(2) 12 SP+	SEP000196BFF75F	Auto 1073	Default	Not Registered	10.35.6.84	⊡ ⊊
	TZ SP+	SEP0001968FF760	Auto 1789	Default	Not Registered	10.35.5.86	B
	() 12 SP+	SEP000196BFF761	Auto 2042	Default	Not Registered	10.35.4.215	_ ⊊

Figure 45-3 Find and List Phones Window

Step 3 Perform one of the following actions:

- Check the check boxes next to the phones that you want to delete and click **Delete Selected**.
- Delete all the phones in the window by checking the check box in the matching records title bar and clicking **Delete Selected**.
- Choose the name of the phone that you want to delete from the list to display its current settings and click **Delete**.

A confirmation dialog displays.

Step 4 Click OK.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Finding a Phone, page 45-28
- Adding a Phone, page 45-4
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Phone Configuration Settings

Table 45-1 describes the available settings in the Phone Configuration window.



The Product-Specific Configuration section contains model-specific fields that the phone manufacturer defines. Cisco CallManager dynamically populates the fields with default values.

To view field descriptions and help for product-specific configuration items, click the "i" information icon to the right of the Product Specific Configuration heading to display help in a popup window.

If you need more information, refer to the documentation for the specific phone that you are configuring or contact the manufacturer

Field	Description		
Device Information			
MAC Address	Enter the Media Access Control (MAC) address that identifies Cisco IP Phones (hardware phones only). Make sure that the value comprises 12 hexadecimal characters.		
	See the "Displaying the MAC Address of a Phone" section on page 45-3 for information on how to access the MAC address.		
	Cisco VG248 Analog Phone Gateway		
	The MAC address for the Cisco VG248 gateway specifies the endpoint from the Gateway Configuration window of Cisco CallManager Administration. See the "Gateway Configuration" section on page 44-1 for configuration information.		
	Only one MAC address exists for the Cisco VG248 Analog Phone Gateway. All 48 ports share the same MAC address. Cisco CallManager requires unique MAC addresses for all devices.		
	Cisco CallManager converts the MAC Address for each device by		
	• Dropping the first two digits of the MAC Address		
	• Shifting the MAC address two places to the left		
	• Adding the two-digit port number to the end of the MAC address (to the right of the number)		
	EXAMPLE MAC Address for the Cisco VG248 is 000039A44218 the MAC address for registered port 12 in the Cisco CallManager is 0039A4421812		

Table 45-1Phone Configuration Settings

Field	Description
Device Name	Enter a name to identify software-based telephones. The value can include 1 to 15 characters, including alphanumeric, dot, dash, and underscores. Cisco CallManager makes this field available only for H.323 clients and CTI ports.
Description	Identify the purpose of the device. You can enter the user name (such as John Smith) or the phone location (such as Lobby) in this field.
	For Cisco VG248 gateways, begin the description with VGC <mac address="">.</mac>
Device Pool	Choose the device pool to which you want this phone assigned. The device pool defines sets of common characteristics for devices, such as region and date/time group.
	The value that you choose overrides the default value for this type of device. See the "Device Defaults Configuration" section on page 6-1.
Calling Search Space	Choose the appropriate calling search space. A calling search space comprises a collection of partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.

Field	Description			
Media Resource Group List	Choose the appropriate Media Resource Group List. A Media Resource Group List comprises a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from the available media resources according to the priority order that is defined in a Media Resource Group List.			
	If you choose <none>, Cisco CallManager uses the Media Resource Group that is defined in the device pool.</none>			
	For more information, see the "Media Resource Management" section in the <i>Cisco CallManager System</i> <i>Guide</i> .			
User Hold Audio Source	To specify the audio source that plays when a user initiates a hold action, click the drop-down arrow and choose an audio source from the list that displays.			
	If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.			
	Note You define audio sources in the Music On Hold Audio Source Configuration window. For access, choose Service > Music On Hold .			
Network Hold Audio Source	To specify the audio source that is played when the network initiates a hold action, click the drop-down arrow and choose an audio source from the list that displays.			
	If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.			
	Note You define audio sources in the Music On Hold Audio Source Configuration window. For access, choose Service > Music On Hold .			

lable 45-1 Phone Configuration Settings (continued	Table 45-1	Phone Configuration Settings (continued)
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Field	Description	
Location	Choose the appropriate location for this Cisco IP Phone. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of <i>None</i> means that the locations feature does not keep track of the bandwidth that is consumed by this Cisco IP Phone.	
	Note If this phone uses the Barge feature, set the Location to None.	
User Locale	From the drop-down list box, choose the locale that is associated with the phone user interface. The user local identifies a set of detailed information to support users including language and font.	le
	Cisco CallManager makes this field available only for Cisco IP Phone 7905, 7940, and 7960 models.	
	Note If no user locale is specified, Cisco CallManage uses the user locale that is associated with the device pool.	er
	Note If the users require information to be displayed (on the phone) in any language other than English, verify that the locale installer is installed before configuring user locale. Refer to the Cisco IP Telephony Locale Installer documentation.	

Field	Description	
Network Locale	associ defini	the drop-down list box, choose the locale that is ated with the phone. The network locale contains a tion of the tones and cadences that the phone in a ic geographic area uses.
	Cisco CallManager makes this field available only for Cisco IP Phone 7940, 7960, and 7905 models, and Cisco VGCPhones (phones that use the Cisco VG248 Gateway).	
	Note	If no network locale is specified, Cisco CallManager uses the network locale associated with the device pool.
	Note	If the users require information to be displayed (on the phone) in any language other than English, verify that the locale installer is installed before configuring network locale. Refer to the Cisco IP Telephony Locale Installer documentation.
Phone Button and Expan	sion Mo	dule Template Information
Phone Button Template	Choose the appropriate phone button template. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button.	
	The value that you enter overrides the default value for this type of device. See the "Device Defaults Configuration" section on page 6-1.	
	Cisco CallManager does not make this field available for H.323 clients or CTI ports.	
Expansion Module 1	If your phone is connected to a Cisco IP Phone 7914 Expansion Module, choose the appropriate template.	
Expansion Module 2	If your phone is connected to a second Cisco IP Phone 7914 Expansion Module, choose the appropriate template.	

Table 45-1 P	Phone Configuration Settings (continued)
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Field	Description		
Softkey Template Infor	Softkey Template Information		
Softkey Template	Choose the appropriate softkey template. The softkey template determines the configuration of the softkeys on the Cisco IP Phones 7960, 7940, and 7905.		
Firmware Load Informa	tion (Leave blank to use default.)		
Phone Load Name	Enter the custom software for the Cisco IP Phone.		
	The value that you enter overrides the default value for the current model. For more information, see the "Device Defaults Configuration" section on page 6-1.		
	Cisco CallManager does not make this field available for H.323 clients or CTI ports.		
	For more information about Cisco IP Phone software and configuration, refer to the <i>Cisco IP Phone</i> Administration Guide for Cisco CallManager.		
Module 1 Load Name	Enter the custom software for the Cisco IP Phone 7914 Expansion Module, if applicable.		
	The value that you enter overrides the default value for the current model.		
Module 2 Load Name	Enter the custom software for the second Cisco IP Phone 7914 Expansion Module, if applicable.		
	The value that you enter overrides the default value for the current model.		
Cisco IP Phone—Exter	nal Data Locations (Leave blank to use default.)		
Information	Enter the location (URL) of the help text for the information (<i>i</i>) button. Leave this field blank to accept the default setting.		
	Cisco CallManager displays this field only for Cisco IP Phone 7960 and 7940 models.		

Table 45-1 Phone Configuration Settings (continued)

Field	Description	
Directory	Enter the server from which the phone obtains directory information. Leave this field blank to accept the default setting.	
	Cisco CallManager displays this field only for Cisco IP Phone 7960 and 7940 models.	
Messages	Leave this field blank (not used by Cisco CallManager).	
Services	Enter the location (URL) for Cisco IP Phone Services. Leave this field blank to accept the default setting.	
	Cisco CallManager displays this field only for Cisco IP Phone 7960 and 7940 models.	
Authentication Server	Enter the URL that the phone uses to validate requests that are made to the phone web server. If you do not provide an authentication URL, the advanced features on the Cisco IP Phone 7960 and 7940 that require authentication will not function.	
	By default, this URL accesses a Cisco IP Phone User Options window that was configured during installation.	
	Leave this field blank to accept the default setting.	

Table 45-1 Phone Configuration Settings (continue

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Field Description		
Proxy Server	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phone HTTP client.	
	If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in cisco.com domain, the phone accesses the URL without using the proxy because the phone is in the same domain as the URL.	
	If you do not configure this URL, the phone attempts to connect directly to the URL.	
	Leave this field blank to accept the default setting.	
	Cisco CallManager does not display this field for Cisco IP Phone 7905.	
Idle	Enter the URL that displays on the Cisco IP Phone 7960 and Cisco IP Phone 7940 LCD when the phone has not been used for the time specified in Idle Timer field. For example, you can display a logo on the LCD when the phone has not been used for 5 minutes.	
	Leave this field blank to accept the default setting.	
	Cisco CallManager displays this field only for Cisco IP Phone 7960 and 7940 models.	
Idle Timer (seconds)	Enter the time (in seconds) that you want to elapse before the URL that is specified in the Idle field displays.	
	Leave this field blank to accept the value of the Idle URL Timer enterprise parameter.	
	Cisco CallManager displays this field only for Cisco IP Phone 7960 and 7940 models.	
Extension Mobility (Devi	ce Profile) Information	
Enable Extension Mobility Feature	Check this check box if this phone supports extension mobility.	

Table 45-1	Phone Configuration Sett	inas (continued)
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Field	Description		
Log Out Profile	This field specifies the device profile used by the device when no one is logged into the device using Extension Mobility. Choose an option from the drop-down selection box. Options include Use Current Device Settings and Select a User Device Profile. When you choose Select a User Device Profile, a configuration window displays for you to choose the user device profile that was already configured.		
Log In User ID	This field remains blank until a user logs in. When a user logs into the device using Extension Mobility, the userid displays in this field.		
Log In Time	This field remains blank until a user logs in. When a user logs into the device using Extension Mobility, the time that the user logged in displays in this field.		
Log Out Time	This field remains blank until a user logs in and logs out. When a user logs into the device using Extension Mobility, the time that the system will log out the user displays in this field.		
Logout	This button displays when a user logs into the device using Extension Mobility. Click the button to manually log out the user.		
Product Specific Con	figuration		
Tin Click the i	button to review product-specific information for these		

Tip Click the i button to review product-specific information for these settings. For additional information on disabling phone settings, see the "Phone Hardening" section in the *Cisco CallManager System Guide*.

Configuring Speed-Dial Buttons

You use Cisco CallManager Administration to configure speed-dial buttons for phones if you want to provide speed-dial buttons for users or if you are configuring phones that do not have a specific user assigned to them. Users use the Cisco IP Phone User Options windows to change the speed-dial buttons on their phones.

Procedure

Step 1 From the Phone Configuration window, click the **Add/Update Speed Dials** link at the top of the window.



Note To display the Phone Configuration window, choose **Device > Phone**. Enter your search criteria and click **Find**. Choose the phone for which you want to configure speed-dial buttons.

- **Step 2** Enter the appropriate settings as described in Table 45-2.
- **Step 3** To apply the changes, click **Update** or click **Update and Close** to apply the changes and close the dialog box.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Resetting a Phone, page 45-8
- Adding a Directory Number, page 45-30
- Updating a Directory Number, page 45-31
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Features, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Speed Dial Configuration Settings

Table 45-2 describes the speed-dial button configuration settings.

Field	Description	
Speed Dial	This field identifies the speed-dial button on the phone on on the Cisco IP Phone 7914 Expansion Module (for example, 1, 2, 3, or 4).	
Number	Enter the number that you want the system to dial when the user presses the speed-dial button.	
Label	Enter the text that you want to appear for the speed-dial button.	
	Cisco CallManager does not make this field available for the Cisco IP Phone 7910.	
Character Set	Choose the language in which the characters display on the speed-dial button.	

Table 45-2	Speed Dial	Configuration	Settings
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Related Topics

- Cisco IP Phone Configuration, page 45-1
- Adding a Directory Number, page 45-30
- Updating a Directory Number, page 45-31
- Configuring Speed-Dial Buttons, page 45-22
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Features, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Configuring Cisco IP Phone Services

From a Cisco IP Phone 7960 and 7940, users can access information services, such as weather, stock quotes, or other services that are available to their company. Using Cisco CallManager Administration, you can set up the available services for phones. Users use the Cisco IP Phone User Options windows to modify the services. For information about the Cisco IP Phone User Options

windows, refer to the *Cisco IP Phone 7960/7940 User Guide*. For more information on maintaining services in Cisco CallManager Administration, see the "Cisco IP Phone Services Configuration" section on page 33-1.

Subscribing to a Service

To subscribe to new services for a phone, perform the following steps.

Before You Begin

Add the services to Cisco CallManager. For more information, see the "Adding a Cisco IP Phone Service" section on page 33-4.

Procedure

Step 1	1 Choose Device > Phone .	
	The Find and List Phones window displays.	
Step 2	To locate a specific phone, enter search criteria and click Find.	
	A list of phones that match the search criteria appears.	
Step 3	Choose the phone to which you want to add a service.	
	The Phone Configuration window displays.	
Step 4	On the upper, right side of the window, click the Subscribe/Unsubscribe Services link.	
Step 5	From the Select a Service drop-down list box, choose the service that you want to add to the phone.	
Step 6	Click Continue .	
	The window displays with the service that you chose. If you want to choose a different service, click Back and repeat Step 5.	
Step 7	Click Subscribe.	
	The service appears in the Your Subscribed Services list.	

Related Topics

- Resetting a Phone, page 45-8
- Updating Services, page 45-26
- Unsubscribing from a Service, page 45-27
- Adding a Cisco IP Phone Service, page 33-4
- Phone Configuration Checklist, Cisco CallManager System Guide

Updating Services

Perform the following steps to update a service. You can update the service name and service parameter values, if necessary.

Procedure

Choose Device > Phone .	
The Find and List Phones window displays.	
To locate a specific phone, enter search criteria and click Find.	
A list of phones that match the search criteria appears.	
Choose the phone for which you want to update a service.	
The Phone Configuration window displays.	
On the upper, right side of the window, click the Update Services link.	
From the Your Subscribed Services list, choose a service.	
Update the appropriate parameter and click Update.	

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Resetting a Phone, page 45-8
- Unsubscribing from a Service, page 45-27
- Adding a Cisco IP Phone Service, page 33-4
- Phone Configuration Checklist, Cisco CallManager System Guide

Unsubscribing from a Service

To unsubscribe from a service, perform the following steps.

Procedure

Step 1	Choose Device > Phone .
	The Find and List Phones window displays.
Step 2	Enter search criteria to locate a specific phone and click Find.
	A list of phones that match the search criteria appears.
Step 3	Choose the phone from which you want to delete a service.
	The Phone Configuration window displays.
Step 4	On the upper, right side of the window, click the Subscribe/Unsubscribe Services link.
Step 5	From the Your Subscribed Services list, choose a service.
Step 6	Click Unsubscribe.
	A warning message verifies that you want to unsubscribe from the service.
Step 7	Click OK to unsubscribe or click Cancel to restore your previous settings.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Resetting a Phone, page 45-8
- Subscribing to a Service, page 45-25
- Adding a Cisco IP Phone Service, page 33-4
- Phone Configuration Checklist, Cisco CallManager System Guide

Finding a Phone

Because you might have thousands of Cisco IP Phones in your network, Cisco CallManager lets you search for phones based on specified criteria. Follow these steps to search for a specific Cisco IP Phone in the Cisco CallManager database.



The Cisco VG248 Gateway will not display when you search for phones. You can search for the Cisco VG248 Analog Phone ports from the Find and List Phones window of the Cisco CallManager Administration. See the "Gateway Configuration" section on page 44-1 for configuration information on the Cisco VG248 Gateway.



For methods to limit your search, refer to the "Phone Search" section in the *Cisco CallManager System Guide*.



During your work in a browser session, Cisco CallManager Administration retains your phone search preferences. If you navigate to other menu items and return to this menu item, Cisco CallManager Administration retains your phone search preferences until you modify your search or close the browser.

Procedure

Step 1 Choose **Device > Phone**.

The Find and List Phones window displays.

Step 2 Choose the field that you want to use to locate a phone.



Note To find all phones that are registered in the database, choose Device Name from the list of fields and choose "is not empty" from the list of patterns; then, click **Find**.

Step 3 Choose the appropriate search pattern for your text search. If you do not want to perform a text search, choose "is empty."

- **Step 4** Enter your search text, if any, in the Find field.
- Step 5 If you choose calling search space or device pool in Step 2, the options that are available in the database display. From the drop-down list box below the Find button, you can choose one of these options.

Step 6 Click Find.

A list of devices that match the criteria appears. The field that you chose in Step 2 determines how the devices in the list are sorted.

This window also lists the total number of devices and windows in this window.

Step 7 To view the next set of discovered devices, click **Next**.



You can delete or reset multiple phones from the Find and List Phones window by checking the check boxes next to the appropriate phones and clicking **Delete Selected** to delete the phones or clicking **Reset Selected** to reset the phones. You can choose all the phones in the window by checking the check box in the matching records title bar.

Related Topics

- Configuring Cisco IP Phones, page 45-2
- Gateway Configuration, page 44-1
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Configuring Directory Numbers

Using Cisco CallManager, you can configure and modify directory numbers that are assigned to specific phones. These sections provide instructions for working with directory numbers.

Use this area of Cisco CallManager Administration to perform tasks such as adding or removing directory numbers, configuring call forward, call pickup, and call waiting, setting the display text that appears on the called party phone when a call is placed from a line, and disabling ring on a line.

Related Topics

- Adding a Directory Number, page 45-30
- Deleting a Directory Number, page 45-33
- Updating a Directory Number, page 45-31
- Directory Number Configuration Settings, page 45-34

Adding a Directory Number

Follow these instructions to add a directory number to a specific phone. You can configure the call waiting, call forward, and call pickup phone features while you are adding the directory number.

Before You Begin

You must add a Cisco IP Phone to Cisco CallManager before adding a directory number. See the "Adding a Phone" section on page 45-4 for details.

Procedure

Step 1	Choose Device > Phone .
	The Find and List Phones window displays.
Step 2	Enter search criteria to locate a specific phone and click Find .
	A list of phones that match the search criteria displays.
Step 3	Click the device name to which you want to add a directory number.
	The Phone Configuration window displays.
Step 4	In the Directory Numbers list, click an unassigned line, such as Line 1 or Line 2.
	The Configure a Directory Number window displays.
Step 5	Enter the appropriate settings as described in Table 45-3.
Step 6	Click Insert.
	A message displays that states that the directory number has been added to the database.
Step 7	To display the Phone Configuration window, click OK . To return to the Directory Number Configuration window, click Cancel .

Step 8 For the changes to take effect, click **Restart Devices**.

A messages indicates the number of devices that you want to restart.

Step 9 Click OK to restart the devices, or click Cancel to cancel the process.



e Devices restart as soon as possible. During this process, the system may drop calls on gateways.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Finding a Phone, page 45-28
- Adding a Phone, page 45-4
- Deleting a Directory Number, page 45-33
- Updating a Directory Number, page 45-31
- Directory Number Configuration Settings, page 45-34
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Features, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Updating a Directory Number

Follow these instructions to update a directory number that is assigned to a specific phone.

Procedure

Step 1 Choose Device > Phone.	
	The Find and List Phones window displays.
Step 2	Enter search criteria to locate a specific phone.
	A list of phones that match the search criteria displays.

- Step 3Click the name of the phone to update.The Phone Configuration window displays.
- **Step 4** From the Directory Numbers list, click the line that you want to update.

The Directory Number Configuration window displays.



te If your phone uses a Cisco IP Phone 7914 Expansion Module, the Directory Numbers list displays the lines for the phone and for the Cisco IP Phone 7914 Expansion Module.

- **Step 5** Update the appropriate settings as described in Table 45-3.
- Step 6 Click Update.
- **Step 7** For the changes to take effect, click **Restart Devices**.

A message indicates the number of devices that you want to restart.

Step 8 Click **OK** to restart the devices or click **Cancel** to cancel the process.



Devices restart as soon as possible. During this process, Cisco CallManager may drop calls on gateways.

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Finding a Phone, page 45-28
- Adding a Phone, page 45-4
- Adding a Directory Number, page 45-30
- Deleting a Directory Number, page 45-33
- Directory Number Configuration Settings, page 45-34
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Features, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Deleting a Directory Number

Perform the following procedure to delete a directory number from a specific phone.

Before You Begin

If you try to delete a directory that is in use, Cisco CallManager displays an error message. To find out which devices are using the directory number, click the **Dependency Records** link from the Directory Number Configuration window. For more information about dependency records, see the "Accessing Dependency Records" section on page A-1. Before deleting a directory number that is currently in use, you should perform either or both of the following tasks:

• Assign a different dir to any media resource groups that are using the media termination point that you want to delete. See the "Updating a Media Resource Group" section on page 28-5.

Delete the media resource groups that are using the media termination point that you want to delete. See the "Deleting a Media Resource Group" section on page 28-7

Procedure

The Find and List Phones window displays.	
Step 2 Enter the search criteria to locate a specific phone and click Fi	nd.
A list of phones that match the search criteria displays.	
Step 3 Choose the device name that contains the directory number tha delete.	t you want to
The Phone Configuration window displays.	
Step 4 From the Directory Numbers list, choose the line that you want	t to delete.
The Directory Number configuration window displays.	
Step 5 Click Delete.	
A message displays to verify that you want to delete the line.	
Step 6 Click OK.	
The Phone Configuration window displays with the line deleted	d.

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Step 7 To reset or restart the phone and apply the new settings, click Reset Phone.

Restarting the phone reregisters the phones with Cisco CallManager without shutting the phone down. Resetting the phone shuts down the phone and brings it back up (performs a complete shutdown and reinitialization of the phones).

Related Topics

- Cisco IP Phone Configuration, page 45-1
- Finding a Phone, page 45-28
- Adding a Directory Number, page 45-30
- Updating a Directory Number, page 45-31
- Resetting a Phone, page 45-8
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide

Directory Number Configuration Settings

Table 45-3 describes the fields that are available in the Directory Number Configuration window.

Field	Description
Directory Number	
Directory Number	Enter a dialable phone number. Values can include numeric characters and route pattern wildcards and special characters except for (.) and (@). The directory number that you enter can appear in more than one partition.
	Shared Line next to the directory number means that the directory number appears on more than one device in the same partition. Refer to "Directory Numbers" in the <i>Cisco CallManager System Guide</i> for more information.

Table 45-3 Directory Number Configuration Settings

Field	Description	
Partition	Choose the partition to which the directory number belongs. Make sure that the directory number that you enter in the Directory Number field is unique within the partition that you choose. If you do not want to restrict access to the directory number, choose <none> for the partition.</none>	
	If more than 250 partitions exist, the ellipsis () button displays next to the drop-down list box. Click the button to display the Select Partition window. Enter a partial partition name in the List items where Name contains field. Click the desired partition name in the list of partitions that displays in the Select item to use box, and click OK .	
Directory Number Settings		
Voice Mail Profile	Choose from list of Voice Mail Profiles that are defined in the Voice Mail Profile Configuration.	
	The first option specifies <none></none> , which is the current default Voice Mail Profile that is configured in the Voice Mail Profile Configuration.	

	Table 45-3	Directory Number Configuration Settings (continued)
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Field	Description
Calling Search Space	Choose the appropriate calling search space. A calling search space comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number.
	Note Changes result in an update of the numbers that are listed in the Call Pickup Group field.
	You can configure calling search space for Forward All, Forward Busy, Forward No Answer, and Forward on Failure directory numbers. The value that you choose applies to all devices that are using this directory number.
	If you set the Forward All Calling Search Space field to <none>, Cisco CallManager uses the calling search spaces of the line and the phone when the user forwards calls by using the Cisco IP Phone User Options windows or the CFwdAll softkey on the phone. If you want to restrict users from forwarding calls on their phones, you must choose a restrictive calling search space from the Forward All Calling Search Space field; for example:</none>
	You have two calling search spaces: Building and PSTN. The Building calling search space only allows users to call within the building, while the PSTN calling search space allows users to call within and outside the building. You assign the phone to the PSTN calling search space and the line on your phone to the Building calling search space. If you set the Call Forward All calling search space to <none>, the Cisco CallManager can forward calls to any number within the PSTN or building calling search spaces. To prevent the user from forwarding calls to numbers outside the building, set the Call Forward All calling search spaces.</none>

Table 45-3 Directory Number Configuration Settings (continued)

Field	Description		
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.		
User Hold Audio Source	Choose the audio source that plays when a user initiates a hold action.		
Network Hold Audio Source	Choose the audio source that plays when the network initiates a hold action.		
Call Waiting	Choose the appropriate call-waiting settings. This field determines whether this directory number uses call waiting when a line is busy (On), responds with a busy signal (Off), or uses the default setting (Default).		
	The value that you choose applies to all devices that are using this directory number.		
Auto Answer	Choose one of the following options to activate the Auto Answer feature for this directory number:		
	Auto Answer Off <default></default>		
	Auto Answer with headset		
	• Auto Answer with speakerphone (Intercom)		
	Note Make sure that the headset or speakerphone is not disabled when you choose Auto Answer with headset or Auto Answer with speakerphone.		

Field	Description
Call Forward and Pie	ckup Settings
Forward All	Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.
	Note When this check box is checked, you cannot enter a directory number in the Destination box or choose a Calling Search Space.
	Destination—This setting indicates the directory number to which all calls are forwarded.
	Use any dialable phone number, including an outside destination.
	Calling Search Space—This setting applies to all devices that are using this directory number.
Forward Busy	Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.
	Note When this check box is checked, you cannot enter a directory number in the Destination box or choose a Calling Search Space.
	Destination—Use any dialable phone number, including an outside destination.
	Calling Search Space—This setting applies to all devices that are using this directory number.

Table 45-3	Directory Number	Configuration	Settings (continued)
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Field	Description
Forward No Answer	Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.
	Note When this box is checked, you cannot enter a directory number in the Destination box or choose a Calling Search Space.
	Destination—This setting indicates the directory number to which a call is forwarded when the call is not answered.
	Use any dialable phone number, including an outside destination.
	Calling Search Space—This setting applies to all devices that are using this directory number.
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).
Line Settings for This De	vice
Display (Internal Caller ID)	Leave this field blank to have the system display the extension.
	Use a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number.
	Setting applies only to the current device unless you check the check box at right and click the Propagate selected button. (The check box at right displays only if other devices share this directory number.)

Field	Description
Line Text Label	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination.
	Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
	Setting applies only to the current device unless you check the check box at right and click the Propagate selected button. (The check box at right displays only if other devices share this directory number.)
External Phone Number Mask	Indicate phone number (or mask) that is used to send Caller ID information when a call is placed from this line.
	You can enter a maximum of 30 number and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
	Setting applies only to the current device unless you check the check box at right and click the Propagate selected button. (The check box at right displays only if other devices share this directory number.)

Table 45-3	Directory Number	Configuration	Settings (continued)
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Field	Description	
Message Waiting Lamp Policy	Use this field to configure the handset lamp illumination policy. Choose one of the following options:	
	• Use System Policy (The directory number refers to the service parameter "Message Waiting Lamp Policy" setting.)	
	Always Light	
	Never Light	
	Setting applies only to the current device unless you check the check box at right and click the Propagate selected button. (The check box at right displays only if other devices share this directory number.)	
Ring Setting When Idle	Use this field to configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Choose one of the following options:	
	• Use system default	
	• Disable	
	• Flash only	
	• Ring once	
	• Ring	
Ring Setting When Active	From the drop-down list box, choose the ring setting that is used when this phone has another active call on a different line. Choose one of the following options:	
	• Use system default	
	• Disable	
	• Flash only	
	• Ring once	
	• Ring	
Character Set	Choose the language in which you want the phone information to display.	

Table 45-3	Directory Number	Configuration	Settings (continued))
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Related Topics

- Cisco IP Phone Configuration, page 45-1
- Gateway Configuration, page 44-1
- Resetting a Phone, page 45-8
- Adding a Directory Number, page 45-30
- Updating a Directory Number, page 45-31
- Cisco IP Phones, Cisco CallManager System Guide
- Phone Features, Cisco CallManager System Guide
- Phone Configuration Checklist, Cisco CallManager System Guide